BIOLOGICAL EVALUATION OF FOREST INSECT CONDITIONS ON THE SAWTOOTH NATIONAL FOREST DURING 1970

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FOREST INSECT CONDITIONS ON THE SAWTOOTH N.F. - 1970

The following report is a record of major forest insect activity on the Sawtooth National Forest in 1970. Information was compiled from aerial detection surveys, on-the-ground biological evaluations and detection reports submitted by the Forest staff.

The Douglas-fir beetle continued to cause extensive group mortality in the South Fork of the Boise River and its tributaries. Even though beetle activity was quite evident, it appeared that a reduction in total numbers of groups attacked had started during 1969. The mountain pine beetle continued heavy attacks in widely scattered locations on both the north and south divisions of the Forest.

Spruce budworm activity in the Big Smoky area declined to a relatively low level and damage was so light as to be undetectable during aerial reconnaissance flights. Elsewhere, nominal tree killing of mature ponderosa pines was experienced from western pine beetle activity and small groups of stagnated second growth pines were killed by Ips. A weevil, Pissodes terminalis Hopp., which has been doing considerable damage in reproduction stands in Sawtooth Valley and south of Galena Summit, continued to destroy terminals of young pines.

DOUGLAS-FIR BEETLE - Dendroctonus pseudotsugae Hopk.

Even though the total number of group losses recorded in Douglas-fir appeared to decline in 1970, this destructive bark beetle continued to kill mature and overmature trees in stands throughout drainages on the Shake Creek and Fairfield Ranger Districts.

Historically, Douglas-fir beetle epidemics build up rapidly, persist for five to seven years, and suddenly drop off due to natural causes. Whether or not this is what we are experiencing at the present time is a matter of conjecture. However, there is a distinct possibility, due to the age of these infestations, that we may be seeing a natural decline in Douglas-fir beetle activity.

Currently, the only recommendation for suppression of the Douglas-fir beetle is by logging. It should be reemphasized that whenever logging is attempted to suppress localized infestations of Douglas-fir beetle, that rigid sale administration be enforced. Residual materials, such as long butts and culls, left in sale areas only add to the potential for continuing bark beetle activity.

On several occasions we observed areas that have been broadcast burned and fire was not hot enough to completely consume the bark. The highly insulative qualities of Douglas-fir bark provide a thermal shield for the Douglas-fir beetle and populations have survived even when this cork-like material has been charred to within an 1/8 inch of the living insect. Complete bark consumption is a must when burning Douglas-fir slash.

Even though we were not able to make a 100 percent evaluation of Douglas-fir beetle problems on the Baldy Mountain Ski Area, it appears that a rather significant reduction in group attacks has taken place. It was recommended last year that trees felled during ski run clearing and widening be cut prior to beetle emergence to act as traps. Infested trap trees were thoroughly burned in the late fall.

An inspection was made around a new run, the "Graduate." Infested Douglas-fir logs from this area were buried at the bottom of the run, soil depths averaging one-to-two feet over the buried logs and no standing tree attacks have been detected in adjacent stands.

Ketchum Ranger District personnel did an extremely good job in coordinating these activities with the Janss Corporation, and it appears their efforts successfully reduced the threat of Douglas-fir beetle activity in several areas of this high-value recreational facility.

A discussion of the 1970 Administrative Study involving the use of a Douglas-fir beetle is attached to this report.

MOUNTAIN PINE BEETLE - Dendroctonus ponderosae Hopk.

The mountain pine beetle continued to maintain high levels of activity forest-wide, with the exception of Sawtooth Valley. Large buildups of this destructive bark beetle occurred on both the north and south divisions and the most dramatic area of increase was on the Cassia Division, where in one area alone an estimated 5-to-8 thousand trees were fading. Due to the extensive nature of mountain pine beetle activity on the Forest, little could be recommended to affect overall suppression. In localized areas, like Wood River Campground, it was suggested that removal of standing infested trees be continued on a maintenance basis. It should be emphasized that as long as larger diameter, thicker phloem high attack risk trees are present, mountain pine beetle activity can be expected to remain at a high level.